



Attorney Docket No. B-4110 618604-0

*PATENT*

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appellant : James Thomas Edward  
McDonnell, et al

Patent Application No.: 09/816,683

Filed: 03/23/2001

For: "Providing Location Data..."

## On Appeal to the Board of Appeals

Group Art Unit: 2135

Examiner: Dada, Beemnet W

Date: September 6, 2006

## BRIEF ON APPEAL

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This is an appeal from the Final rejection, dated April 19, 2006, for the above identified patent application. Appellants submit that this Appeal Brief is being timely filed, since the notice of Appeal was filed on July 13, 2006. Please charge the Appeal Brief fee of \$500.00 to deposit account no. 08-2025.

## REAL PARTY IN INTEREST

The real party in interest to the present application is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC

## RELATED APPEALS AND INTERFERENCES

Appellant submits that there are no other prior and pending appeals, interferences or judicial proceedings which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

### STATUS OF CLAIMS

Claims 1-18 and 24-32 are currently pending. Claims 6, 13, 15, 29 and 32 are allowable if rewritten in independent form and Claims 19-23 have been canceled without prejudice. Claims 1-5, 7-12, 14, 16-18, 24-28 and 30-31 are the subject of this Appeal and are reproduced in the accompanying Claims appendix.

### STATUS OF AMENDMENTS

No Amendment After Final Rejection has been entered.

### SUMMARY OF CLAIMED SUBJECT MATTER

The invention described and claimed in the present application relates to the provision and use of location data concerning mobile entities (p. 1, ll. 5-6).

According to the present invention, location-based services may be provided to a mobile entity 20 (p. 4, ll. 9-29, Claim 31). In order to provide location-based services, location data is provided to a recipient 20, 40 (p. 4, ll. 19-29, Claims 1, 24). Contrary to the prior art, the present invention discloses providing the location data that represents the location of the mobile entity 20, not information about base stations (Claims 1, 24).

Claim 1 of the present disclosure is directed to a method of billing for location data that represents the location of a mobile entity (20), wherein: the location data is provided in encrypted form by a location server (79) to a recipient that is one of the mobile entity (20) and a service system (40) for providing a location-based service to the mobile entity using said location data as an input, the location data being encrypted such that it cannot be decrypted by the recipient; the encrypted location data is subsequently passed by said recipient to a decryption entity (80) that is not under the control of a user of the recipient; and the decryption entity (80) decrypts the location data and generates a billing record in respect of the location data. (p. 12, l. 14 to p. 18, l. 5)

Claim 24 of the present disclosure is directed to an arrangement for billing for location data that represents the location of a mobile entity (20), the system comprising: a location server (79) for providing said location data in encrypted form requiring

knowledge of a secret to decrypt it; a recipient for receiving the encrypted location data from the location server, the recipient being one of the mobile entity (20) and a service system (40) for providing a location-based service to the mobile entity using said location data as an input, the location server being arranged to encrypt said location data such that it cannot be decrypted by the recipient; and a decryption entity (80) that is not under the control of a user of the recipient, the decryption entity being adapted to decrypt the encrypted location data and to generate a corresponding billing record in respect of the location data; the recipient being arranged to pass the encrypted location data directly or indirectly to the decryption entity for decryption. (p. 12, l. 14 to p. 18, l. 5)

Claim 31 of the present disclosure is directed to a method of providing location data that represents the location of a mobile entity (20), wherein: the location data is provided in encrypted form by a location server (79) to the mobile entity (20), the location data being encrypted such that it can only be decrypted by a decryption entity (80) associated with the location server; the encrypted location data is subsequently passed by the mobile entity to a service system to enable the latter to provide a location-based service to the mobile entity using said location data in unencrypted form as an input; and the service system obtains the location data in unencrypted form by using a said decryption entity to decrypt the encrypted location data. (p. 12, l. 14 to p. 15, l. 24)

### **GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

**Issue 1:** Whether Claims 1-5, 7-12, 14, 16-18, 24-28 and 30-31 are patentable under 35 U.S.C. 102(e) in view of Pirila, U.S. Patent No. 6,674,860, (hereinafter "Pirila")?

### **ARGUMENT**

**Issue 1: Whether Claims 1-5, 7-12, 14, 16-18, 24-28 and 30-31 are patentable under 35 U.S.C. 102(e) in view of Pirila, U.S. Patent No. 6,674,860, (hereinafter "Pirila")?**

In the final Office Action of April 19, 2006, the Examiner rejects Claims 1-5, 7-12, 14, 16-18, 24-28 and 30-31 under 35 U.S.C. 102(e) as being anticipated by Pirila. Appellants respectfully disagree with the Examiner's rejection and request that

the rejection be overturned on appeal.

#### Claim 1

Appellants submit that Pirila does not disclose, suggest or teach, *inter alia*, at least the following features recited by Claim 1 of the present application:

“location data is provided in encrypted form by a location server to a recipient” (emphasis added)

The Examiner asserts that the “location data” as recited in Claim 1 is disclosed by Pirila’s “location information.” See page 2, section 4 of the Official Action.

Although Pirila is concerned with the transfer of encrypted “location information” to a mobile station, the term “location information” as used in Pirila means:

“base station position coordinates, real time difference (RTD) data and other base station related data that are needed to determine the location of a mobile station”

as is explained at column 3, lines 53-56 of Pirila. It is fundamental to the whole concept of Pirila that the location information is information about the base stations and that this location data is encrypted and broadcast to mobile entities. In contrast to Pirila, the “location data,” as recited claim 1, “represents the **location of the mobile entity**” (emphasis added).

During the telephone conference held on January 30, 2006 between the Examiner, Alex Krayner and the undersigned Robert Popa, the Examiner stated that although the “location information” disclosed in Pirila contains information about the base stations, the information about the base stations is used to determine location of the mobile station. Hence, in the Examiner’s opinion the information that can be used to determine the location of the mobile station discloses “location data that represents the **location of a mobile entity**” (emphasis added) as recited in Claim 1.

Appellants respectfully object to the Examiner’s interpretation of the pending claims in light of the cited reference. According to Pirila, the information that represents location

of the base station is sent to the mobile station and is used by the mobile station to determine the location of the mobile station. See Abstract of Pirila. It is not clear why the Examiner considers information about the base station to disclose data “that represents the location of the mobile entity” as recited in Claim 1, just because the information about the base station is going to be used at some point in calculating the location of a mobile entity.

Basically, the “location data” that is “provided ... to a recipient” as recited in Claim 1 is not disclosed by Pirila, because the information provided by Pirila is about the base station, not “mobile station” as recited in Claim 1.

Therefore, Appellants submit that Pirila does not teach, disclose or suggest “location data is provided in encrypted form by a location server to a recipient” as recited in Claim 1. Hence, Claim 1 is patentable over Pirila and the rejection should be reversed on appeal.

#### Claims 2-18

Claims 2-18, at least based on their dependency on Claim 1, are also patentable over Pirila.

#### Claim 24

Appellants submit that, at least for the reasons stated above for Claim 1, Pirila does not teach, disclose or suggest “location data that represents the location of a mobile entity ... a location server for providing said location data in encrypted form” as recited in amended Claim 24. Hence, Claim 24 is patentable over Pirila and the rejection should be reversed on appeal.

#### Claims 25-30

Claims 25-30, at least based on their dependency on Claim 24, are also patentable over Pirila.

Claim 31

Appellants submit that, at least for the reasons stated above for Claim 1, Pirila does not teach, disclose or suggest "location data that represents the location of a mobile entity ... the location data is provided in encrypted form by a location server to the mobile entity" as recited in Claim 31. Hence, Claim 31 is patentable over Pirila and the rejection should be reversed on appeal.

Claim 32

Claim 32, at least based on its dependency on Claim 31, is also patentable over Pirila.

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### Conclusion

For the extensive reasons advanced above, Appellant respectfully contends that each claim is patentable. Therefore, reversal of all rejections and objections is courteously solicited.

The Commissioner is authorized to charge any additional fees which may be required or credit overpayment to deposit account no. 08-2025. In particular, if this Appeal Brief is not timely filed, the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136(a) requesting an extension of time of the number of months necessary to make this response timely filed and the petition fee due in connection therewith may be charged to deposit account no. 08-2025.

I hereby certify that this correspondence is being deposited with the United States Post Office with sufficient postage as first class mail in an envelope addressed to: Mail Stop Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22323-1450 on

September 6, 2006

(Date of Mailing)

Aileen Shrestha

(Name of Person Mailing)

  
(Signature)

September 6, 2006

(Date)

Respectfully submitted,



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Encls: Claims Appedix;  
Evidence Appendix;  
Related Proceedings Appendix.

1. (Previously presented) A method of billing for location data that represents the location of a mobile entity, wherein:

the location data is provided in encrypted form by a location server to a recipient that is one of the mobile entity and a service system for providing a location-based service to the mobile entity using said location data as an input, the location data being encrypted such that it cannot be decrypted by the recipient; the encrypted location data is subsequently passed by said recipient to a decryption entity that is not under the control of a user of the recipient; and the decryption entity decrypts the location data and generates a billing record in respect of the location data.

2. (Original) A method according to claim 1, wherein the encrypted location data is decrypted by the decryption entity with explicit or implicit authorisation by the mobile entity.

3. (Original) A method according to claim 1, wherein the recipient is the mobile entity and the decryption entity is under the control of the location server or an agent of the latter.

4. (Original) A method according to claim 2, wherein the recipient is the mobile entity and the decryption entity is under the control of the location server or an agent of the latter.

5. (Currently amended) A method according to claim 4, wherein mobile entity passes the encrypted location data to a service system in association with a service request to the latter, the service system then passing the encrypted location data to the decryption entity for decryption and return.

6. (Original) A method according to claim 5, wherein the encrypted location data includes the identity of the mobile entity to which the location data relates, the mobile entity passing the service system authenticatable identity data concerning itself and the



service system, and the service system passing the identity data to the decryption entity which authenticates the identity data and only returns the decrypted location data to the service system if both:

- the mobile entity indicated by the identity data is the same as the one to which the location data relates, and
- service system indicated by the identity data is the same as the one asking the decryption entity to decrypt the location data.

7. (Original) A method according to claim 4, wherein mobile entity passes the encrypted location data to the decryption entity for decryption and return.

8. (Original) A method according to claim 1, wherein the recipient is the mobile entity and the decryption entity is a service system to which the mobile entity passes the encrypted location data in association with a service request.

9. (Original) A method according to claim 2, wherein the recipient is the mobile entity and the decryption entity is a service system to which the mobile entity passes the encrypted location data in association with a service request.

10. (Original) A method according to claim 1, wherein the recipient is the service system and the decryption entity is under the control of the location server or an agent of the latter.

11. (Original) A method according to claim 2, wherein the recipient is the service system and the decryption entity is under the control of the location server or an agent of the latter.

12. (Original) A method according to claim 11, wherein the service system passes the encrypted location data to the decryption entity for decryption and return, upon receipt of an authoring service request from the mobile entity.

13. (Original) A method according to claim 12, wherein the encrypted location data includes the identity of the mobile entity to which the location data relates, the mobile entity passing the service system authenticatable identity data concerning itself and the service system, and the service system passing the identity data to the decryption entity which authenticates the identity data and only returns the decrypted location data to the service system if both:

- the mobile entity indicated by the identity data is the same as the one to which the location data relates, and
- service system indicated by the identity data is the same as the one asking the decryption entity to decrypt the location data.

14. (Original) A method according to claim 11, wherein the mobile entity obtains the encrypted location data from the service system and passes it to the decryption entity for decryption and return.

15. (Original) A method according to claim 14, wherein the encrypted location data includes the identity of the mobile entity to which the location data relates, the mobile entity passing the decryption entity authenticatable identity data concerning itself, and the decryption entity authenticating the identity data and only returning the decrypted location data to the service system if the mobile entity indicated by the identity data is the same as the one to which the location data relates.

16. (Original) A method according to claim 11, wherein the service system is a location-data archive system.

17. (Original) A method according to claim 1, wherein the recipient is the service system and the decrypting entity is the mobile entity, the latter having received the encrypted location data from the service system.

18. (Previously presented) A method according to claim 2, wherein the recipient is the service system and the decrypting entity is the mobile entity, the latter having received the encrypted location data from the service system.

19-23 Canceled.

24. (Previously presented) An arrangement for billing for location data that represents the location of a mobile entity, the system comprising:

- a location server for providing said location data in encrypted form requiring knowledge of a secret to decrypt it;

- a recipient for receiving the encrypted location data from the location server, the recipient being one of the mobile entity and a service system for providing a location-based service to the mobile entity using said location data as an input, the location server being arranged to encrypt said location data such that it cannot be decrypted by the recipient; and

- a decryption entity that is not under the control of a user of the recipient, the decryption entity being adapted to decrypt the encrypted location data and to generate a corresponding billing record in respect of the location data;

the recipient being arranged to pass the encrypted location data directly or indirectly to the decryption entity for decryption.

25. (Previously presented) An arrangement according to claim 24, wherein the recipient is the mobile entity and the decryption entity is under the control of the location server or an agent of the latter.

26. (Previously presented) An arrangement according to claim 25, wherein the mobile entity is operative to pass the encrypted location data to a service system in association with a service request to the latter, the service system being arranged to pass this encrypted location data to the decryption entity for decryption and return.

27. (Previously presented) An arrangement according to claim 25, wherein the mobile entity is operative to pass the encrypted location data directly to the decryption entity for decryption and return.

28. (Previously presented) An arrangement according to claim 24, wherein the recipient is the service system and the decryption entity is under the control of the location server or an agent of the latter.

29. (Previously presented) An arrangement according to claim 28, wherein the service system is operative to pass the encrypted location data to the decryption entity for decryption and return, upon receipt of an authorising service request from the mobile entity, the mobile entity being adapted to generate said service request.

30. (Previously presented) An arrangement according to claim 28, wherein the mobile entity is operative to obtain the encrypted location data from the service and pass it to the decryption entity for decryption and return.

31. (Previously presented) A method of providing location data that represents the location of a mobile entity, wherein:

the location data is provided in encrypted form by a location server to the mobile entity, the location data being encrypted such that it can only be decrypted by a decryption entity associated with the location server;

the encrypted location data is subsequently passed by the mobile entity to a service system to enable the latter to provide a location-based service to the mobile entity using said location data in unencrypted form as an input; and

the service system obtains the location data in unencrypted form by using a said decryption entity to decrypt the encrypted location data.

32. (Previously presented) A method according to claim 31, wherein the encrypted location data includes the identity of the mobile entity to which the location data relates, the mobile entity passing the service system authenticatable identity data concerning itself and the service system, and the service system passing the identity data to the decryption entity which authenticates the identity data and only returns the decrypted location data to the service system if both:

- the mobile entity indicated by the identity data is the same as the one to which the location data relates, and

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- service system indicated by the identity data is the same as the one asking the decryption entity to decrypt the location data.

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No evidence is being submitted

No copies of decisions rendered in related proceedings are being submitted.